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Proceedings of the Atlantic Salmon Stock Assessment Peer Review for the Maritimes Province for 2000

January 15 – 17, 2001
Gulf Fisheries Centre, Miramichi Boardroom,
Moncton, NB

P. Fanning, Chairperson

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Science Branch, Maritimes Region
Bedford Institute of Oceanography
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March 2002

Canada

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Foreword

The purpose of this proceedings is to archive the activities and discussions of the meeting, including research recommendations, uncertainties, and to provide a place to formally archive official minority opinions. As such, interpretations and opinions presented in this report may be factually incorrect or mis-leading, but are included to record as faithfully as possible what transpired at the meeting. No statements are to be taken as reflecting the consensus of the meeting unless they are clearly identified as such. Moreover, additional information and further review may result in a change of decision where tentative agreement had been reached

Avant-propos

Le présent compte rendu fait état des activités et des discussions qui ont eu lieu à la réunion, notamment en ce qui concerne les recommandations de recherche et les incertitudes; il sert aussi à consigner en bonne et due forme les opinions minoritaires officielles. Les interprétations et opinions qui y sont présentées peuvent être incorrectes sur le plan des faits ou trompeuses, mais elles sont intégrées au document pour que celui-ci reflète le plus fidèlement possible ce qui s'est dit à la réunion. Aucune déclaration ne doit être considérée comme une expression du consensus des participants, sauf s'il est clairement indiqué qu'elle l'est effectivement. En outre, des renseignements supplémentaires et un plus ample examen peuvent avoir pour effet de modifier une décision qui avait fait l'objet d'un accord préliminaire

102-03921/

Table of Contents

Abstract / *Résumé* 4

Introduction / *Introduction* 5

Traffic Light Approach for Atlantic Salmon Stocks /
L'approche des feux de circulation pour stocks de saumon atlantique 5

Environmental Conditions / *Condition Environnementale* 7

Chaleur Bay (SFA 15) / *Chaleur Bay (ZPS 15)* 8

Miramichi Basin (SFA 16) / *Bassin Miramichi (ZPS 16)* 8

Prince Edward Island (SFA 17) / *Île du Prince Edward (ZPS 17)* 10

Northern Nova Scotia (SFA 18 in part) /
Côte Nord de la Nouvelle Écosse (une partie de ZPS 18) 10

Cape Breton (SFA 19 and Part of SFA 18) /
Cap-Breton (ZPS 19 et une partie de ZPS 18) 11

Atlantic Coast of Nova Scotia (SFA 20 & 21) /
Côte Atlantique de la Nouvelle Écosse (ZPS 20 &21) 12

Inner Bay of Fundy (SFA 22 & 23) /
L'intérieur de la Baie de Fundy (ZPS 22 &23) 12

Outer Bay of Fundy (Western Part of SFA 23) /
L'Extérieur de la Baie de Fundy (Partie Ouest de ZPS 23) 13

Appendix 1 / *annexe 1* - Meeting Remit / *Dossiers reportés* 14
Appendix 2 / *annexe 2* - List of Participants / *liste de participants* 16
Appendix 3 / *annexe 3* - Agenda / *Ordre du jour* 18
Appendix 4 / *annexe 4* - Invitation Letter / *Lettre d'invitation* 19

Abstract

A peer review of the Maritime Atlantic salmon stocks assessments was conducted at the Gulf Fisheries Centre, Moncton, January 15-17, 2001. The remit was to review the status of Maritime salmon stocks, provide a forecast of returns in 2001 and the immediate years beyond, and provide management advice on the different stocks.

Ten working papers were reviewed and formed the basis of the stock status report for Maritime Atlantic salmon. Forty-eight individuals from DFO, provincial agencies, First Nations, conservation organisations and a public utility participated in the review.

Résumé

Les évaluations des stocks de saumon atlantique des provinces Maritimes ont fait l'objet d'un examen par les pairs au Centre des pêches du Golfe, à Moncton, du 15 au 17 janvier, 2001. Le renvoi devant les pairs avait pour objet d'examiner l'état des stocks de saumon des Maritimes, de prévoir les remontes en 2001 et dans les quelques années subséquentes, et de formuler des conseils sur la gestion de ces différents stocks.

Dix documents de travail, qui constituaient la base des rapports sur l'état des stocks de saumon atlantique des provinces Maritimes, ont été examinés. Quarante-huit personnes provenant du MPO, d'organismes provinciaux, des Premières nations, d'organismes de conservation et d'un service public participaient à cet examen.

Introduction

A peer review of the Maritime Atlantic salmon stock assessment was conducted in the Miramichi Boardroom of the Gulf Fisheries Centre in Moncton on 15-17 January 2001. The remit for the review (Appendix 1) was:

- Evaluate a river classification system and 'traffic light' framework for salmon stock assessments.
- Review an overview of environmental conditions.
- Review the status of Maritime salmon stocks in 2000.
- Provide forecasts of returns in 2001 and immediate years beyond.
- Provide management advice for the individual stocks or groups of stocks.

Paul Fanning, the Chairperson welcomed the participants (Appendix 2) and the agenda (Appendix 3) was then reviewed and accepted.

Traffic Light Approach for Atlantic Salmon Stocks

Summary

Traffic light system included a decision rule process with blue, red, yellow and green colours based on a relationship between Atlantic salmon returns relative to conservation and an estimate of exploitation. Additionally, the system provided a summary of "scores" on six different attributes, stock resilience, adult abundance, freshwater production, marine recruitment, environmental constraints, and management considerations.

Issues

Concern was expressed that the purpose and use of a traffic light approach was not well explained and not documented. The remit did not specify that fisheries management asked for a traffic light system. Concern was also expressed that such an approach could not be put in place for this assessment but could be a theme for discussion and review and consideration in the future.

Clarification was asked for regarding the input of fisheries management into the development of this system and whether it was as a result of their request and did they endorse the product.

- No document was available for review at the meeting and it was suggested that more time would be necessary to review a document of such a complex system.

- The question was posed: "Are we planning to discard the current method for managing fisheries and has there been a thorough analysis of the previous management decisions made and result (result as in change in Atlantic salmon

returns as a result of a management decision) and if not, should that not be a precursor to adopting a new system such as the traffic light approach?"

- The attribute score for Management considerations included some evaluation of level of hatchery intervention. Some concern was expressed regarding how that intervention is scored since removal of broodstock from a river involves loss of spawners, and value of fish released from a hatchery is not equivalent to wild fish.

- There was confusion regarding how the scheme used weighting for the various "sub-attributes" (variables?) and attributes. Several concerns were expressed about how attributes and their contributing variables were scored. A major disagreement with the system was that "red" did not mean "stop".

Recommendations

Support was expressed for the "traffic light" concept generally. Several suggestions were made to round out the process described, which could make it more robust:

- Scoring of "preseason forecast" in Management considerations appears weighted unduly heavily. Recommended review of that evaluation.

- Use of "unknown" and the weighting associated with it was not described but affected the outcome. Avoid "unknown" or do not weight it (e.g., no marine recruitment information was weighted red).

- River habitat and social influence variables were not included in the list of items scored for the various attributes. Rather, habitat quality and use by fish was inferred through juvenile data and the environmental constraints attribute included land-use practices and discharge. Suggested that consideration be given to incorporating additional use of habitat and social influence variables.

- Scoring of some variables were subjective such as the evaluation of smolt survival (changed from yellow to red). Reliability and transportability of the system would require limiting the number of variables scored subjectively. System has to be transportable to be valuable. Need to identify which variables and attributes must be available in order to make the system useable elsewhere.

- Plans to incorporate a time-series approach to the result would be very informative for management once a multiple year data set is available.

- Traffic light system as described does not provide a risk analysis approach for fisheries management to apply the system to decisions for future stock performance. In other words, traffic light summarizes the state of the information available for the status of the stock and a result which provides guidance for fisheries management to advise on harvest or access strategies given a "green",

"yellow", or "red". Subsequent information would be required to assess risk such as in response to the question from management "What would be the effect of a hook-and-release fishery in the face of a red designation in the traffic light system?"

- Decision framework to arrive at blue (stock is approaching extirpation and needs protection) needs clarification.
- Decision rule chart implies that managers should strive to be in the yellow zone to avoid over-exploitation (red) and under exploitation (green). Is that the intent of the system?
- Available information would preclude application of this process to many rivers.
- Genetics of the stock and any proposed supported stocking program and the effect of the stocking on genetics would be critical pieces of information in the decision framework which are not included in the description of this system.

Environmental Conditions

Summary

In summary, the streamflow conditions during 2000 were characterized by an earlier spring in January and April, which resulted in lower monthly flow in May and June. Record low monthly flows were observed in April for Wilmot River (PEI).

The spring runoff in 1999 was characterized as mild in most rivers with peak flows close to or less than the 2-year flood with the exception of Wlimot River. Wlimot River peak flow exceeded the 5-year flood this year. Spring peak flows for many rivers occurred earlier this year in January in NS and in early April in NB and March in PEI. December peak flows this year in NS were higher spring peaks.

Low flows were not severe in the Maritime Provinces this year with most discharge higher close to the 2-year low flow. These daily low flows occurred between September and October for all rivers. Winter low flows were similar to summer low flows for rivers such as Upsalquitch R. (NB) and NE Margaree R. (NS).

Mean air temperatures in 2000 was back to normal this year at 5.3 °C compared to a record year in 1999 (7.0 °C) in the Maritime Provinces (Caissie 2000). Summer air temperatures were slightly lower than the average at 14.1 °C compared to the mean of 14.5°C. These air temperatures reflected similar conditions on water temperatures.

Issues

Changes may be occurring in the winter conditions although this has not been examined yet. For example, the timing of ice cover with respect to peak flows could lead to ice jamming and negative impacts on the fish. Impact of global warming may be becoming detectable as the noise around the mean becomes greater such that we have had a greater frequency of extreme events in the 1990's than before. Land use changes may also be having effects although they are difficult to detect in the hydrology unless they exceed something like removal of 20% of the forest cover.

Chaleur Bay (SFA 15)

Recommendations

Fence counts available on the Restigouche should be reviewed and grilse estimates provided if feasible.

Information from the non-index rivers (Pokmouche-Caraquet) juvenile surveys should be included where it exists. Also Jacquet River electrofishing results should be reported.

Miramichi Basin (SFA 16)

Summary

An estimated 35,000 small salmon and 18,200 large salmon returned to the Miramichi River in 2000. Although this represents a return 25% below the previous five-year average, it was a substantial improvement over 1999 return estimates of 25,000 small and 16,000 large salmon. Year 2000 represents the fourth consecutive year that adult returns were insufficient to meet conservation requirements. Returns after August remain especially disappointing.

Large salmon returns for the Southwest Miramichi were estimated at 13,100 fish and, for the Northwest Miramichi, 4,700 fish. Large salmon accounted for about 80% of the total eggs (122 million eggs) to the Miramichi drainage for 2000.

Egg depositions for 2000 after accounting for removals and including small salmon contributions approximate at least 80% of the conservation requirement.

Adults returning to the Miramichi in recent years are the largest for the 28-year time series, the influence of size-selection mortality by the past commercial fisheries.

Smolt estimates for the Northwest Miramichi were highest in 1999 at 450,000 fish and lowest in 2000 at 155,000 fish. Sea survival of small salmon has ranged 3.1-4.5%.

Smolt production in 1999 and 2000 has been equivalent to 2.9 and 0.9 smolts per 100 m , considerably less than considered optimum production of 3 to 5 smolts per 100 m .

Issues

Low adult abundance for the Northwest Miramichi appears to be related to lower than expected smolt production and low sea-survival. The lower smolt production relative to high juvenile abundance may be indicative of a freshwater constraint.

Angling catch and effort information (DNRE's Fishsys) remains unavailable for years 1998,1999 and 2000.

Movements of tagged adults between the Northwest and Southwest Miramichi estuaries may bias indicate a bias in previous years adult population estimates.

Previous assessments to forecast large salmon returns based on a relationship with previous years small salmon returns, have been inaccurate.

There is some concern that small salmon egg viability maybe less than the viability of large salmon.

Recommendations

Mark and recapture data for adults should be revised to accommodate an improved model that may better account for movement of tagged fish in estuaries to better assess Southwest and Northwest Miramichi population estimates.

The ratio forecast model for predicting large salmon returns from previous grilse returns should also be calculated considering only returns of maiden small and large salmon.

Egg contributions by adult salmon sampled in 2000 should be proportioned to show contributions from four age components, i.e., maiden small and large salmon and repeat spawner small and large salmon.

Eggs of small salmon brood stock should be examined to determine whether captive time and holding time influence egg viability.

Age and growth associations of juvenile salmon with smolt production and subsequent adult returns should be studied.

Consideration of a traffic light assessment possibly using a Delphi-type approach to boundary setting.

Prince Edward Island (SFA 17)

Summary

No estimate of egg deposition for 2000 because the fish trap did not operate. Serious land use problems continue to impact the fish, and were reviewed in DFO Habitat Status Report 2000/1E.

Stakeholder groups are frustrated that the recommendation from RAP and ZMAC's were not acted upon. This is due in part to the long time delay in making changes to fishing regimes that cannot be accomplished through variation orders of existing regulations. Science recommendations need to focus on the conservation issues, and the managers will then have to examine the tools they have to attempt to meet the conservation objective.

Recommendations

Recommendations from the habitat RAP will be included in the SSR.

Northern Nova Scotia (SFA 18 in part)

Issues

The salmon returns and the percent of conservation requirements met for all these rivers were calculated from angling catches and angling exploitation rates on River Philip for 1995-99. If angling catches were low because fish entered these rivers late in 2000 than return estimates would be incorrect. It was suggested that status for 2000 be displayed as values with confidence intervals attached to emphasize the uncertainty in these results. The angling exploitation rates that these return estimates were based need to be displayed in the document to emphasize their variability.

The Margaree River is also in SFA 18 and could provide corroborating evidence of the overall trend in salmon returns for the Northumberland Strait Nova Scotia area. It is generally agree that all Gulf Nova Scotia rivers generally trend up and down together.

The Wallace River has had continued low levels of juvenile abundance relative to the rest of the area. This difference needs to be highlighted to emphasise that the Wallace River has probably not met the conservation requirement for some time.

Recommendations

These rivers have been meeting spawning escapements in most cases for many years. The sudden change in their status in 2000 needs to be corroborated with more than angling data. It was recommended that additional field data be collected in 2001 so their

status can be assessed by estimates of returns based on a second data set independent of the angling statistics.

Cape Breton (SFA 19 and Part of SFA 18)

Summary

There were two changes in assessment procedures implemented in 2000.

- The first involved the Baddeck River, where the returns were again based on diver counts. No count had been possible in 1999 and the return estimate was based on the assumtion that the Baddeck and Middle rivers tracked each other, and conclusions were drawn for the Baddeck River from Middle river patterns.

- The second is that the Grand River count was less complete than in previous years, and the estimate is interpreted accordingly.

Issues

Why is there such a big difference between returns and spawner estimates for the Middle river when there are only two recorded removals? The Baddeck River also has significant removals that are not accounted for in the table. Insert a footnote in the Table or the text to indicate that unallocated removals are occurring and accounted for in the Middle and Baddeck Rivers.

Concern was expressed about the lack of error limits for the angling-based estimatesof escapement for the North River. The text will be reworked in order to clarify things.

The period over which salmon were counted in the Grand River needs to be clarified, explaining that the count discontinued because of a confrontation with residents of Chapel Island First Nation.

The terms "realized" and "allocated" as applied to removals need to be better explained in the text.

Recommendations

For the Margaree assessment, estimate numbers should be rounded off to the nearest 10 to reflect some of the uncertainty in the method.

It is recommended that the feasibility of using results from the Margaree assessments to help build confidence in the estimates for the rest of SFA 18 be explored.

Atlantic Coast of Nova Scotia (SFA 20&21)

Issues

The question of whether egg deposition or returns should be reported for the LaHave River above Morgan falls was raised. This will be dealt with in the next assessment.

Counts at the Liscomb fishway discontinued after 1999 and counts from the East River Sheet Harbour fishway were presented as a new index for partially-acidified rivers. It was pointed out that a comparison of the two series is required to establish their equivalency.

It was noted that there were inconsistencies in terminology regarding stages of juvenile salmon within and between draft sections of the SSR. It was concluded that a consistent vocabulary to designate age-groups of juveniles in freshwater would be beneficial. However, any decision as to what terminology should be adopted was left to the Editorial Board.

Acid-impacted rivers dependent on stocking (East River Sheet Harbour, Mersey, Clyde, Jordan) are again expected to yield returns available for harvest. However these rivers have not been self-sufficient for broodstock. Broodstock used to produce juveniles stocked in these rivers have come from the LaHave River, which itself has low stocks.

Recommendations

It was recommended that the appropriate equivalency Liscomb fishway counts and East River Sheet Harbour counts be examined during the next assessment.

It was also recommended that the justification for using LaHave fish to support stocking of other rivers requires critical examination.

Inner Bay of Fundy (SFA 22&23)

Summary

Assessment of the status of salmon in rivers of the inner Bay of Fundy was last done in 1998. Updates were provided in 1999 and are again provided for 2000. No data was presented to indicate that the population had increased or was at all near the conservation requirement.

Issues

The only quantitative information available to assess the status of the stocks was electrofishing. The addition of population estimates at various ages and stages i.e. smolts or adults, would improve the robustness of the assessment.

Recommendations

Endeavor to develop population estimates for iBoF salmon at three life stages, juvenile, smolt and adult.

Outer Bay of Fundy (Western Part of SFA 23)

Summary

Adult assessments in this SFA are aged rather than sized fish. This is because 1SW fishwhich in other SFA's are always "small" (≤63cm) are occasionally >63cm in western SFA 23. The SFA is defined in three subareas as Saint John River upstream of Mactaquac; Saint John River downstream of Mactaquac and Other Outer Bay of Fundy Rivers.

Issues

The numbers for hatchery-origin fish contributing toward egg deposition in the Saint John River need to be verified. There are other tributaries in the Saint John River System (Gaspereau, Canaan, Salmon, etc...) for which juvenile data is available and should be provided.

The use of the estimated 30% attainment of conservation requirement for the Hammond River in 1998 in suggesting escapement in 2000 need to be better examined. The redd count data series from 1998-2000 should be considered. It was noted that the Hammond River fry estimates have been meeting the Elson norm but there does not appear to be the expected numbers of parr.

The "Interim" conservation requirements for the Magaguadavic River are so designated because differences between estimates of three different investigators have yet to be resolved.

The report for the St. Croix River has an apparent "missing fish" problem with respect to broodstock which needs to be resolved. It was noted that the St. Croix River is going through a salmonid restoration project.

Recommendations

Review the Hammond River redd counts and juvenile series to utilise the more recent data more fully.

Appendix 1. Meeting Remit
Annexe 1. Dossiers reportés

Meeting of the Maritimes Regional Advisory Process On Atlantic Salmon from the Maritime Provinces Miramichi Boardroom Moncton, New Brunswick Jan. 15 to 18, 2001

A 5-year Atlantic salmon integrated fisheries management plan (IFMP) for the Maritimes is being prepared. This plan will set out a broad framework for management, monitoring and compliance. Complementing the IFMP will be annual fishing plans developed through consultation and which will provide the fishing rules in two year increments.

In support of the development of the multi-year management plan and particularly for the development of fishing plans for 2001 and 2002, advice is sought on a river categorization matrix to define the status of salmon stocks in the Maritimes. Categorization criteria should be based on stock attributes and the stocks should be assessed relative to appropriate attributes. The resulting classification would form the basis of multi-year fisheries management plans.

Stock Assessments

In support of the development of the IFMP and the categorization matrix describing stock status, assessments/updates of the following stocks will be reviewed:

- Restigouche River, Salmon Fishing Area (SFA) 15
- Nepisiquit and Jacquet rivers SFA 15
- Tabusintac River SFA 16
- Miramichi River, SFA 16
- Buctouche and Gulf NB Northumberland Strait rivers, SFA 16
- PEI, SFA 17
- Gulf NS mainland rivers, SFA 18
- Cape Breton Island rivers, part of SFA 18 and SFA 19
- Eastern shore of Nova Scotia, SFA 20
- LaHave River, South shore, SFA 21

Réunion du processus consultatif régional sur le saumon atlantique des provinces Maritimes qui aura lieu dans la salle de réunion Miramichi à Moncton (N.-B.) du 15 au 18 janvier 2001

On est en train de préparer un plan de gestion intégrée quinquennal de la pêche du saumon atlantique (PGIPSA) pour les provinces Maritimes. Ce plan établira un grand cadre pour la gestion et la surveillance de la pêche ainsi que l'observation de la conformité. Comme compléments au plan quinquennal, des plans de pêche annuels seront établis par un processus de consultation et ceux-ci fixeront les règles de pêche pour des périodes de deux ans.

Afin d'aider à l'élaboration du plan de gestion pluriannuel et plus particulièrement à l'élaboration des plans de pêche pour 2001 et 2002, nous voulons obtenir des conseils sur une matrice de catégorisation des rivières dans le but de déterminer la situation des stocks de saumons dans les Maritimes. Les critères de catégorisation devraient être fondés sur les attributs des stocks et ceux-ci devraient être évalués relativement aux attributs appropriés. La classification qui en découlera formera l'assise des plans de gestion pluriannuels des pêches.

Évaluations des stocks

Afin de contribuer à l'élaboration du PGPISA et de la matrice de catégorisation décrivant la situation des stocks, nous passerons en revue les évaluations ou mises à jour des stocks suivants :

- Rivière Ristigouche, zone de pêche du saumon (ZPS) 15
- Rivières Nepisiquit et Jacquet, ZPS 15
- Rivière Tabusintac, ZPS 16
- Rivière Miramichi, ZPS 16
- Rivière Bouctouche et rivières donnant sur le détroit de Northumberland de la Région du Golfe (N.-B.), ZPS 16
- Î.-P.-É., ZPS 17
- Rivières de la partie continentale du secteur du Golfe Nouvelle-Écosse, ZPS 18
- Rivières de l'île du Cap-Breton, partie de la

- Inner Bay of Fundy rivers, SFA 22 and part of 23
- Saint John River upriver of Mactaquac, and outer Bay of Fundy rivers (including downriver of Mactaquac on the Saint John) SFA 23

Indicators of stock status and associated limit reference points will be examined for key stocks. Consideration will be given to use of the Traffic Light Approach to summarize the stock status information, and to the definition of status categories which can be used in a decision tree framework for evaluating management options.

A Stock Status Report for the Maritime Provinces will be produced with associated supporting research documents.

Environmental Conditions Overview

An overview of meteorological and hydrological conditions potentially affecting run timing and status of salmon in index rivers of the Maritime provinces will be presented with comparisons to recent and historical trends. These will be summarized in the stock status report.

Marine conditions also potentially affecting salmon abundance and run timing will be summarized within the stock status report.

Traffic Light Overview

In view of the proposal to use the Traffic Light Approach and a river categorization to define stock status, a description of the chosen stock attributes, their evaluation relative to the traffic light indicators and the proposed criteria and values for defining overall stock status will be presented and reviewed at the meeting.

ZPS 18 et ZPS 19
- Côte Est de la Nouvelle-Écosse, ZPS 20
- Rivière LaHave, côte Sud, ZPS 21
- Rivières de l'intérieur de la baie de Fundy, ZPS 22 et une partie de la ZPS 23
- Rivière Saint-Jean, en amont de Mactaquac, et les rivières des approches de la baie de Fundy (y compris en aval de Mactaquac sur la rivière Saint-Jean), ZPS 23

Les indicateurs de l'état des stocks et les points de référence limites associés seront examinés pour les stocks clés. Nous songerons à adopter une démarche calquée sur les feux de circulation (jaune, rouge, vert) afin de résumer l'information sur l'état des stocks et de définir les catégories de l'état qui peuvent être utilisées dans un cadre de décision aux fins de l'évaluation des options de la gestion.

Un rapport sur l'état des stocks dans les provinces Maritimes sera établi de même que les documents de recherche connexes.

Aperçu des conditions environnementales

Un aperçu des conditions météorologiques et hydrologiques qui peuvent affecter le moment de la montaison et l'état du saumon dans les rivières-repères des provinces Maritimes sera présenté en comparant avec les tendances récentes ainsi qu'avec les tendances historiques. Le tout sera résumé dans le rapport sur l'état des stocks.

Les conditions marines qui peuvent avoir une incidence sur l'abondance du saumon et le moment de la montaison seront également résumées dans le rapport sur l'état des stocks.

Aperçu de la démarche calquée sur les feux de circulation

À la lumière de la proposition visant à utiliser une démarche semblable à celle des feux de circulation pour déterminer la prudence avec laquelle il faut aborder une rivière et afin de procéder à une catégorisation des rivières pour définir l'état des stocks, nous présenterons et examinerons à la réunion une description des attributs choisis pour les stocks, leur évaluation par rapport aux indicateurs des feux de circulation et les valeurs et critères proposés.

Appendix 2. List of Participants
Annexe 2. Liste de participants

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McLaughlin, Rhonda	Bowater, Miramichi	506-369-2479	506-369-7443	rockybrk@nb.sympatico.ca
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Metallre, Raymond	Listuguj, Quebec	418-788-5990		

Participant / Participant	Affiliation/Address / Affiliation/Adresse	Telephone / Téléphone	Fax / Télécopieur	E-mail / Courriel
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Wissink, Rene	Fundy National Park	506-887-6098	506-897-6011	renee_wissink@pch.gc.ca

Appendix 3. Agenda
Annexe 3. Ordre du jour

Agenda / Ordre du jour

Monday January 15, 2001 / lundi le 15 janvier 2001	
13:00	Introduction, review of agenda / Introduction, revue de l'ordre du jour
13:15	Review of traffic light approach for summarizing Atlantic salmon stock status / Revue de l'approche des feux de circulation pour résumer l'état des stocks de saumon atlantique
17:30	End of session / Fin de la session
Tuesday January 16, 2001 / mardi le 16 janvier 2001	
8:30	Review of environmental conditions in 2000 / Revue des conditions environnementales en 2000
10:00	Miramichi River Atlantic salmon / Saumon atlantique de la rivière Miramichi
12:15	Lunch break / Pause – déjeuner
13:00	Restigouche River Atlantic salmon / Saumon atlantique de la rivière Restigouche
14:30	Review of updates for Gulf shore of NB, PEI and NS (Salmon fishing areas 15 to 18) / Revue des mis-à-jour pour les stocks du golfe N-B, Î-P-È, et N-É (Zones de pêche à saumon 15 à 18)
17:30	End of session / Fin de la session
Wednesday January 17, 2001 / mercredi le 17 janvier 2001	
8:30	Review of updates for Atlantic coast of Nova Scotia and Bay of Fundy (Salmon Fishing Areas 19 to 23) / Revue des mis-à-jour pour les stocks de la côte atlantique de N-É et de la Baie de Fundy (Zones de pêche à saumon 19 à 23)
12:15	Lunch break / Pause - déjeuner
13:00	Review of stock status report text for environmental conditions, Restigouche River and Miramichi River / Revue du texte sur les conditions environnementales, rivière Restigouche et rivière Miramichi
15:30	Catch-up and revisit outstanding issues / Remettre à l'ordre du jour et retour aux sujets non-résolus
17:30	End of session / Fin de la session
Thursday January 18, 2001 / jeudi le 18 janvier 2001	
8:30	Finish review of SSR if required / Compléter la revue du rapport, si nécessaire
	Review proceedings if ready and required / Revue du compte-rendu si disponible et nécessaire
12:00	End of peer review meeting / Fin de la réunion

Appendix 4. Invitation Letter
Annexe 4. Lettre d'invitation

Science Branch
Gulf Fisheries Management Region
343 avenue Université, Moncton, (NB)
E1C 9B6

December 19, 2000

«Title» «FirstName» «LastName»
«Company»
«Address1»
«City», «State»
«Postal_Code»

«Title» «LastName»:

ANNUAL ATLANTIC SALMON STOCK ASSESSMENT MEETING FOR THE MARITIME PROVINCES

This letter is to invite you to the scientific peer review session for the Atlantic salmon stocks of the Maritime Provinces. A description of the session and a draft agenda are attached.

Please note that the scientific peer review is not a consultation but a science review of the data, interpretations and conclusions of the status of Atlantic salmon stocks in the Maritime provinces. As such, the review is expected to be technical in nature and objective in its conclusions.

The session will take place **January 15 to 18, 2001, in the Miramichi Room (6th Floor)** of the Gulf Fisheries Centre, 343 Université Avenue, Moncton, N. B. It will commence at **1:00 p.m.** on **Monday, the 15th** , and finish at **12:00 p.m. Thursday the 18th January.**

You and/or representatives of your organization are welcome to come and participate in the discussion of those agenda items in which you have interest. We hope your interests will be represented. However, we are unable to assist with travel expenses.

For more information, you may contact Denise LeBlanc, Diadromous Fish Section, Moncton (NB) at (506) 851-6253.

Sincerely yours,

Direction des sciences
Région de la gestion des pêches du Golfe
343 avenue Université, Moncton, (NB)
E1C 9B6

le 19 décembre, 2000

RÉUNION ANNUELLE D'ÉVALUATION DES STOCKS DE SALMON ATLANTIQUE POUR LA PROVINCES MARITIMES

Nous voulons par la présente vous inviter à la séance de l'examen par les pairs des stocks de saumon atlantique des provinces Maritimes. Vous trouverez sous ce pli une description de la séance et un projet d'ordre du jour.

Veuillez noter que l'examen par les pairs scientifique n'est pas une consultation mais un examen de la science des données, des interprétations et des conclusions de l'état des stocks du saumon Atlantique dans les provinces Maritimes À ce titre, on s'attend à ce que la revue soit technique dans sa nature et objectif dans sa conclusion.

La séance aura lieu du **15 au 18 janvier 2001, dans la salle Miramichi (6e étage)** du Centre des pêches du golfe, au 343, avenue Université, à Moncton (N.-B.). Le tout débutera à **13h 00 le lundi 15 janvier** et se terminera à **12h00 le jeudi 18 janvier.**

Vous-même ainsi que des représentants de votre organisation êtes invités à participer à la discussion pour les points à l'ordre du jour qui vous intéressent. Nous espérons que vos intérêts seront représentés, mais nous ne pouvons malheureusement pas assumer vos frais de déplacement.

Pour plus de renseignement veuillez contacter Denise LeBlanc, Section des poissons diadromes, Moncton (NB) au (506) 851-6253.

Veuillez agréer, Monsieur, l'expression de nos sentiments les meilleurs,

Paul Fanning
Chairperson / président
Diadromous Fish section / Section des poissons diadromes

Attachments / pièces jointes